

ATGCCCAAGCGCGCACTGGGGGGCCCTCTCCGTGGTGCTGATCTGCTTTGGGGCCATCCGCGAGTGGCGCTGGCCCTGCCCGCATCTTTGTCCT  
GCTACGTCCCCAGCGAGGTCCACTGCAGTTCCGATCCCTGGCTTCCGTGCCCGCTGGCATTGCTAGACACGTGGAAGAAATCAATTTGGGGTTTAA  
TAGCATACAGCGCCTGTGCAGAACTCATTTGCAGAGACTGACCAAGTTGGAGTACTTATGATTACGGCAATGAGATCCCAAGCATCCCCGATGGA  
GCTTTAAGACCTCAGCTCTTTCAGTTTCAAGTTCAGTCAACAAGCTGAGAGTGATCACAGGACAGCCCTCCAGGGTCTCTCTAACTTAA  
TGAGGCTGCACATTGACCAACAAGATCGAGTTTATCCACCTCAAGCTTTCAACGGCTTAACGTCTCTGAGGCTACTCATTGGGAAGAAATCT  
CCTCCACCAGCTGCACCCAGCACCTTCTCCAGTTTCACATTTTGGATTATTTAGACTCTCCACCATAAGGCACCTCTACTTAGCAGAGCAATG  
GTTAGAACTCTTCTGCCAGCATGCTTCGGAACATTCGCGCTTCTGGAGAATCTTACTTGCAGGGAAATCCGTGGACCTGCGATTGTGAGATGAGAT  
GGTTTGTGAATGGGATCGAAATCCAGAGGAATTCGAAGTGTAAAAGGCAAGAGCTTATGAAGCGCGTCAGTTGTGTGCAATGTCTTCAGTCC  
AAAGAAGTTGTACAAATCATGAGATACAGAGCTGAAGGACATGCTGTCTGAAGCCTTAATAGAGTCCCTCTGAGACGAACAGGAGCAGGAGT  
ATTGAGGAGGAGCAAGAACAGGAAGAGGATGGTGGCAGCCAGCTCATCTGGAGAAATTCCAATGCCCGCAGTGGAGCATCTTTGAATAGACCG  
ACGAGCACGGGCAACATGGTGAACATTGGTCTGTGACATCAAGAAACCAATGGATGTGTACAAAGTCACTTGAACCAACCGATCTCCAGATATTGA  
CATAAATGGAACAGTTGGTCTGGACTTGGAGTGTCCAATGACCCGAGAAACTATGAAAGCTATGGAATTTGATAGCATACTACAGTGAAGTTCCT  
GTGAAGCTACACAGAGAGCTCATGCTCAGCAAAAGCCAGAGTCAGTACAGTACAGGAGGATGTGATGAGGAAGCTCTTACTACAGAGAGT  
TGAGAGCCAGATTCTTGCAAGCAGAAATGGGTATGCAGCATCCATAGATATCCAGCTGAACCGACGTGAGATACGGCAAGAAAGTGCTACT  
TTCTACTACACCATGATTTCTCAAAACAATTCACCAAAAGATACAAGCAGGCTCGGGGCAGAAAGCTGGGTATGATTGAGCCTAGTGGAGCTGTG  
CAAGAGATCAGACTGCTCTGGAAGGGGTCCATGCCAGTTGAGCTGCAACGTGAAGCTCTGAGAGTCCATCTATCTTCTGGGTGCTTCCAGATG  
GCTCCATCTCTGAAAGCGCCATGGATGACCCAGACAGCAAGTTCTCCATTCTACAGAGTGGCTGGCTGAGGATCAAGTCCATGGAGCCATCTGACTC  
AGGCTTGTACAGTGCATTGCTCAAGTGAAGGATGAAATGGACCGCATGGTATATAGGGTACTTGTGCAAGTCTCCCTCCATCAGCCAGCGGAGAA  
GACACAGTGACAATTTGGCAAGAACCCAGGGGATGCGGTGACATTGCTTGAATGCTTTAGCAATACCCGAAGCCACCTTAGCTGGATTCTTCCAA  
ACAGAAGGATAATTAATGATTGGCTTAACACATCATGTATACATGTTGCCAAATGGAACCTTTCCATCCCAAAGGTCGAAGTCAGTGATAGTGG  
TTACTACAGATGTGTGGCTGTCAACAGCAAGGGGACAGCAATTTACGGTGGGAATCAAGTGACCAAGAAAGGGTCTGGCTTGCATCCAAAGA  
GGCAGACGCCAGGTGCAAAGGCTCTTTCCAGAGTCAGAGAAGACATCGTGGAGGATGAAGGGGGCTCGGGCATGGGATGAAGAGCAATCTCAA  
GGAGACTCTGCAATCCAAAGGCAACAGAGGTGTCTCTCAAAACAAGGATGATGCCATCAATGGAGACAAGAAAGCCAAAGAAAGGAGAAGAAAGCT  
GAACTCTGGAAGCATTTGGAAAAAGAACAGGACCAATGTTGCAGAGTGCAGAGTGTTTGAATCTAGACGAAGGATAAATGCAAGCAAA  
GAGATTAATCCGAGCGCTGGCTGATATTTAGCAAGTCGTTGGGAAAAATCTCCCTAAGGCGACGAAGTACCCCGTTGATTAACCAACAA  
GTCTCCATCTTGGAGCTAGAAGTCACACCACCTTTTCTGCTGTTTCTCCCCCTCAGCTCTCTGTGACAGATGAACGCTGTGAAGATC  
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AGGGGACAGCGCCCTACACTTATCTGAGCTTATGAACCTCTCTACTCTGCACATCTAGACACAGTCTATGAAAGTCCACCCCAAGGA  
GACGGCAACAGAGGGTTGGTCTGCAGCAGATGTTGGATGCTCACCAGAGCCACATCCAGTGAATGAGCCTTCAATGGATGTGCTCTCTGGCT  
GAGTCTGAGCCCATGCAATACTTTGACCCAGATTTGGAGACTAAGTCACAACCAGATGAGGATAAGATGAAAGAAGACACCTTTGCACACCTTACTC  
CAACCCACCATCTGGGTTAATGACTCCAGTACATCAGATTAATTTAGGATTCTACTATAGGGGAACAGGCTGTCCAGGCCAATACATCTACA  
AGGACTGACAGCAACATCCACCTTGTGAAAGTAGTCTAAGCATCAAGACACCTTACTGATTAAGAAAGGATGAAGAGAGATGCTCTCAGACACTA  
CAGGGAGGAAATATGCTAGAGGAGAGACCCACACATCCGAAGTCTCTGAGAGTGGGGCAAGAGGACCAATTCATCTTTGCTGACTCCACAC  
TGGGTATTAATGAGCAGTATGCTCTCCAGTTAAGAAGCCTGCGGAAACCACAGTTGGTACCCTCTAGACAAAGACACCACAACAGTAACAACACAC  
AAGGCAAAAGTTGCTCCGCTCTCCACATGAGCATCACCCTTCTCGAAGAGACCCAAAGGGAGAGGAGATTACGCCCAACAAATTCGCCAC  
CGGCAAGCAACCAACCCACCAACATTTGGCCCATCAGAGACTTTTTCTACTCAACCACTCAAGCAGCTGACATTAAGATTTCAAGTCAAGTGG  
AGAGTTCTCTGGTTCTACAGCTTGGGTGGATAAACAAGTAAATACCCCAAAGCTTGAAGTGGAGAAATGCAAGAACCCATCAAGGGAAC  
ACCACGGAGAAACACGGGAAGAGGCCAAACAACATCGATATACCCTTCTACAGTGAAGTCAAGAGCGTCCGGATCCAAGGCCAGCCCTCTCCA  
GAAATTAACATGAACAACTGTTTCTCCGATTCAGAACTATACCTTTTGCTTAGAACTGTTTCTCTGAAACTGAGGGCCCTTATGATTCCTTAG  
ATTACATGACAACCAAGCAAAAATATTTACTCTTACCCTAAGTCCAAGAGACATCTCCAGTACATATAAACCCACATCAGATGGAAGAAAT  
TAAGGATGATGTTGCCACAAATGTGACAAACATAAAAGTGACATTTAGTCACTGGTGAATCAATTAATGCAATACCAACTCTCGCTCTGTG  
GTCTCCACTATGGGAGAAATTAAGGAAGAATCTCTCTGTAGGCTTTCCAGGAACCTCAACCTGGAATCCCTCAAGGACGGCCAGCTGGGAGG  
TACAGACGACATACCTGTACCACCTTCTGGGGAATCTTACAGACCTTCCCTTCTAAGAGCTTGAGGATGTGGATTCACTTCCGAGTTTTT  
GTCTCTTTGACAGTCTCCACCACTTCCAGGAGAAGAGTGGTCTTCCACCACTCTCAAGCATAAAAGTGGAGTGGCTTCAAGTCAGGCA  
GAAACCCACACCTTGTATCAGATCATCTTGAACCACTGTGGCTATTCTCTTTGAAACTAGACCAAGCAATCAACCCCTACTGCTGCCGGA  
TGAAGGAGCCAGCATCTCGTCCCCATCCACAATTTCTCATGTCTTTGGGACAAACCACCACCTAAGCCAGCAGCTTCCAGTCCAAGAAATCTCA  
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ACATATCTCTTGGGCTTTGCCAGGAGAACAACAGCTTTACAACCTCAAGATTTACAAGTCAACAACATTCCTCTCCCATGACATGTCCAAACCA  
GATCTCTAGTAAGTTTACTGACCGAAGAACTGACCAATTCATGGTTACTCCAAAGTGTGGAATTAACAACATCTCCCTGAGGCAAGAAACCCAGT  
TGAAGAGCCTCCAGTCCAAGAAATCTCTATTATTTCCAAGTGAAGACTCCCTTCTTACCAACAGACTCTTCTTTTCCAGAGTTGGAGTCAAC  
CGGAGACCCAGATACCCACTTCTCTGCCCCAGTAATGAGAGAGAGAAAGTTATTCCAGGTTCTTACAACAGGATACATTTCCCATGACCTTCC  
ATCTGGACTTTGGCCCTCGGCCACTCCGTGTTGTGCACATCCGACAGACAGGATACCCCTCAACTAAGTACAGAATATCCCTATGGTCTCTTC  
CACCCAGAGTTCTATCTCTTATAACATCTTCTGTCAGCTCTCAGGAAGCTTCCACAGAGCAGCTCAAGGTTCTTTGAGGAGACCTTCCGCA  
TCCAATTTCTGGTCTCTTGGGGAAGAGCCCAATCTCACCAGTCTCCACAGAGTGTGTCGTGACCGCTGAGACAGACATGTGTTTCCCTGTG  
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CAAGAACGGTACCTTAGTGATACGGAAGGTTCAAGTACAAGATCGAGGCCAGTATATGTGACCGCCAGCAACCTGCACGGCCTGGACAGGATGGTG  
GTCTTGGCTTTCGGTACCGCTGCAGCAACCTCAAACTCTAGCTCCCACTACAGGAGCTCACTGTCTACCTGGGAGACACCATGCAATGGAGTGTG  
TGGCAAGAGGACCCAGCCGCCCAATTTCTGTGATCTTCCCTGACAGAGAGGTGGGAACTGTGTCCTCCCTGGAGAGCCGCATACCCCTGCA  
CGAAACCGGACCTTTCCATCAAGGAGGCGTCTTCTCAGACAGAGGCGTCTATAAGTGCCTGGCCAGCAATGACGGCGGGGAGACAGCTGGCC  
ATCCGCTGACGTGGCGGCACTGCCCCCGTTATCCGACAGGAGAAGCTGGAGAACTCTCGTGGCCCGGGGCTCAGCATTCACATTCAGTGA  
CTGCCAGGCTGCGCCCTGCCAGCTGCGCTGGTGCTCTGGGAGAGCTACCCAGATCCGCCCCCTGCGAGTTCTCTCCAGGGAACTTGTGTTTT  
CCCCAACGGGACGCTCTACATCCGAACCTCTCGGCCCAAGGACAGCGGGCGCTATGAGTGCCTGGCCCAACCTGTTAGGCTCCGCGCAGGAC  
GTGACGTGAACGTGCAGCGTGCAGCAGCAACGCGCGCATCACGGGCACCTCCCCGCGAGGACGAGCTCAGTACGAGGAACCTCAAGCTGG

**FIG. 1**

ACTGCAGCGCCTCGGGGACCCCTGGCCGCGCATCCTCTGGAGGCTGCCGTCCAAGAGGATGATCGACGCGCTCTTCAGTTTTGATAGCAGAATCAA  
GGTGTTCGCAATGGGACCCTGGTGGTGAATCAGTGACGGACAAAGATGCCGGAGATTACCTGTGCGTAGCTCGAAATAAGGTTGGTGATGACTAC  
GTGGTGCTCAAAGTGGATGTGGTGATGAAACCGGCCAAGATTGAACACAAGGAGGAGAACGACCACAAAGTCTTCTACGGGGGTGACCTGAAAGTGG  
ACTGTGTGGCCACCGGGCTTCCCAATCCCGAGATCTCCTGGAGCCTCCAGACGGGAGTCTGGTGAACCTCTTCATGCAGTCGGATGACAGCGGTGG  
ACGCACCAAGCGCTATGTCGTCTTCAACAATGGGACACTCTACTTTAACGAAGTGGGGATGAGGGAGGAAGGAGACTACACCTGCTTTGCTGAAAT  
CAGGTCGGGAAGGACGATGAGAGTCAGAGTCAGAGTCAAGGTGGTGACAGCGCCGCCACCATCCGGAACAAGACTTACTTGGCGGTTTCAGGTGCCCTATG  
GAGACGTGGTCACTGTAGCCTGTGAGGCCAAAGGAGAACCCTAGCCCAAGGTGACTTGGTGTCCCCAACCAACAAGGTGATCCCCACCTCCTCTGA  
GAAGTATCAGATATACCAAGATGGCACTCTCCTTATTAGAAAGCCAGCGTCTTGACAGCGGCAACTACACCTGCTGGTCAGGAACAGCGCGGGA  
GAGGATAGGAAGACGGTGTGGATTACGTCAACGTCCAGCCACCAAGATCAACGGTAACCCCAACCCCATCACCACCGTGGCGGAGATAGCAGCGG  
GGGCGAGTCGGAACTGATTGACTGCAAGCTGAAGGCATCCCCACCCGAGGGTGTATGGGCTTTTCCGAGGGTGTGTTCTGCCAGCTCCATA  
CTATGAAACCGGATCACTGTCCATGGCAACGGTTCCTGGACATCAGGAGTTTGGAGAGAGCGACTCCGTCCAGCTGGTATGCATGGCAGCGAAC  
GAGGGAGGGGAGGCGAGGTTGATCGTGACGCTCACTGTCTGGAGCCCATGGAGAAACCCATCTTCCAGACCCGATCAGCGAGAAGATCAGGCCA  
TGGCGGGCCACACCATCAGCCTCACTGCTCTGCCGCGGGGACCCGACACCCAGCCTGGTGTGGGCTCTTCCCAATGGCAGCGATCTGCAGAGTGG  
ACAGCAGTCGGAACTGATTGACTGCAAGCTGAAGGCATCCCCACCCGAGGGTGTATGGGCTTTTCCGAGGGTGTGTTCTGCCAGCTCCATA  
AATGCCGCTGGCCACACGGAGAGGCTGGTCTCCCTGAAGGTGGGACTGAAGCCAGAAGCAACAAGCAGTATCATAACCTGGTCAGCATCATCAATG  
GTGAGACCTGAAGCTCCCTGCACCCCTCCCGGGGCTGGGACGGGACGTTTCTCTGGACGCTCCCCAATGGCATGCATCTGGAGGGCCCCCAAC  
CCTGGGACGCTTCTCTTCTGGACAATGGCACCCTCAGGTTCTGTGAGGCTCGGTGTTTGACAGGGGTACCTATGTATGCAGGATGGAGACGGAG  
TACGGCCCTTCGGTCAGCAGCATCCCGTGATTGTGATCGCTATCTCCCGGATCACCAGCGAGCCACCCGCGCATCTACACCGCCCGCGGA  
ACACCGTGAACCTGAAGTGCATGGCTATGGGATTCCCAAGCTGACATCAGTGGGAGTTACCGGATAAGTCGCATCTGAAGGCAGGGGTTACGGC  
TCGTCTGTATGGAACAGATTTCTTACCCCCAGGGATCACTGACCATCCAGCATGCCACACAGAGAGATGCCGCTTCTACAAGTGCATGGCAAAA  
AACATTCTCGGCAGTGACTCCAAACAACCTTACATCCAGTCTTCTGAATGTGGATTCCAGAATGATTGCTTAGGAAGTGCACAAAGCGGGGTT  
TGTAAAGGAAGCTGAGGCTTGGGAAATAGGAGCTCTTAAATATGTGTCAGAGTGGTGGGCTCTGGTGGGTTTCAAGTTGATCTTGTATCT  
TACAATTTGTTGGGAAAAGGAAGCAATGCAGACACGAGAAGGAGGGCTCAGCCTGTGAGACACTTTCTTTTGTGTTTACATCATGCCAGGGCTTC  
ATTCAGGTTGTCTGTGCTCTGACTGCAATTTTCTTCTTTTGCAAATGCCACTCGACTGCCTTCATAAGCGTCCATAGGATATCTGAGGAACATTCA  
CCAAATAAGCCATAGACATGAACAACACCTCACTACCCATTGAAGACGCATCACCTAGTTAACCTGCTGCAGTTTTTACATGATAGACTTTGTT  
CCAGATGAAGTCACTCTTTGATTTTCTTCTGTCTCAAACTCAAACTGTGCTGGTGGGCTCTGGTGGGTTTCAAGTTGATCTTGTATCT  
ATATATTTTAATTTCAGAGTTACATACATACAGTACCATTATATGAAAAAGAAAAACATTCTTCTGGAAGTCACTTTTATATATGTTT  
TATATATATTTTCTTCAATCAGACGATGAGACTAGAAGGAGAAATCTTCTGTCTTATTAATTAATAAATTATTGCTCTTACAAGACT  
TGGATACATTACAGCAGACATGGAAATATAATTTAAAAAATTTCTCTCAACCTCCTTCAAAATTCAGTCACCACTGTTATATTACCTTCTCCAGGA  
ACCTCCAGTGGGGAAGGCTGCGATATTAGATTCTCTGTATGCAAAAGTTTTGTGTAAGCTGTGCTCAGAGGAGGTGAGAGGAGAGGAAGGAGAA  
AACTGCATCATAACTTTACAGAATTGAATCTAGAGTCTTCCCCGAAAAGCCAGAAACTTCTCTGCAGTATCTGGCTGTCTTCTGTTCAAGGTG  
GCTGCTCTTCCCCAGCATGAGTCAGTTGTGCCCATGAATAATACAGACCTGTTATTTCCATGACTGCTTTACTGTATTTTAAAGTCAATATA  
CTGTACATTTGATAATAAAATAATTTCTCCCAAAAAA

FIG. 1 - CONTINUED

MPKRAHWGALSUVVLLWGHPRVALACPHPCACYVPSEVHCTFRSLASVPAGIARHVERINLGFNSIQALSETSFAGLTKLELLMIHNEIPSIPDG  
ALRDLSSLQVFKFSYNKLRVITGQTLQGLSNLMRLHIDHNKIEFIHPQAFNGLTSLRLLHLEGNLLHQLHPSTFSTFTFLDYFRLSTIRHLYLAENM  
VRTLPASMLRNMPLEENLYLQGNPWTCDEMRWFLEWDAKSRGILKCKKDKAYEGGQLCAMCFSPKKLYKHEIHLKDMTCLKPSIESPLRQNRSR  
IEEEQEEEDGGSQILILEKFLQPLQWSISLNMTHDEHGMNVLCIDKKPMVDYKIHNLQTDPPDIDINATVALDFECPMTRYENYKWLKLIAYYSEVP  
VKLHRELMLSKDPRVSQYRQDADEALYYTGVAQILAEPEWVMQPSIDIQLNRRQSTAKKVLLSYTQYSQTIISTKDRQARGRSWVMIEPSGAV  
QRDQTVLEGGPCQLSCNVKASESPSIFWVLPDGSILKAPMDDPDSKFSILSSGWLRIKSMEPSDSGLYQCIQVRDEMDRMVYRVLVQSPSTQPAEK  
DTVTIGKNPGESVTLPCNALAIPEAHLISWILPNRRIINDLANTSHVYMLPNGTSLIPKVQVSDSGYYRCVAVNQGGADHFTVGTITVTKKSGSLPSKR  
GRRPGAKALSRVREDIVEDEGGSGMDEENTSRLLHFKDQEVFLKTKDDAINGDKKAKGRRLKLWKHSEKEPTEPNVAGERRVFSERRINMANK  
QINPERWADILAKVRGNLPLKGTVEPPLIKTSPPSLSLEVTPPFPAVSPSPASPVQVTSAEESSADVPLLGEHEHVLGTISSASMGLEHNHNGVI  
LVEPEVTSTPLEEVDDLSEKTEETSTEGDLKGTAAPTLISEPYEPSPTLHTLDTVYEKPTHEETATEGWSAADVGSSEPTSSSEYEPPLDAVSLA  
ESEPQMYPDPLETKSQPDEDKMKEDTFAHLTPTPTIWNDSSTSQLFEDSTIGEPGVPGQSHLQGLTDNIHLVKSSLSTQDTLLIKKGMKEMSQT  
QGNMLEGDPHTSRSSSESEGESKSIITLPDSTLGIMSSMPVKKPAETVTGTLMDKDTTPTVTTTQKQVAPSTMTSTHPSRRRPNRRRLHGLDRMV  
RHKQTPPTTFAPSETFSTQPTQAPDIKISSQVESSLVPTAWVDNTVNTPKQLEMEKNAEPTSKGTPRRKHGKRPKNHRYTPSTVSSRASGSKPSPSP  
ENKHRNIVTPSSETILLPRTVSLKTEGPDYSLDYMTTRKIYSSYPKVOETLPVTYKPTSDGKEIKDDVATNVDKHKSIDLVTGESITNAIPTSRSL  
VSTMGEFKEESSPVGFPPTWNPSTRAQPGRLQTDIPVTTSGENLTDPPLLKELEDVDFTEFLSSLTVSTPFHQEEAGSSSTLSSIKVEVASSQA  
ETTTLDQDHLETTVAILLSETRPQNHPTAARMKEPASSPSTILMSLGQTTTTPALPSPRISQASRDSKENVFLNYVGNPETEATPVNNEGTHM  
SGPNELSTPSSDRDAFNLSTKLELEKQVFGSRSLPRGPDQRQDGRVHASHQLTRVPKPIPTATVRLPEMSTQSASRYFVTSQSPRHWTNKPEIT  
TYPGALPENKQFTTTPRLSSTIPLPLHMSKPSIPSKFTDRRTDQFNGYSKVFNNNIPEARNPVGKPPSPRIPHYNGRLPFTTNKLSFPQLGVT  
RRQIPTSPAPVMRERKVI PGSYNRIHSHSTFHLDFGPAPPLLHTPQTGTSPSTNLQNI PMVSSSTQSSISFITSVQSSGSFHQSSSKFFAGGPPA  
SKFVSLGEPQILTKSPQTSVTAETDVTFFCEATGKPFVTKVSTGALMTNTRIQRFEVLKNGTLVIRKVQVQDRGQYMTASNHLGLDRMV  
VLLSVTVQQPQILASHYQDVTVYLGDTIAMECLAKGTPAQISWIFPDRRVQTVSPVESRITLHENRTLSIKEASFSDRGVYKCVASNAAGADSLA  
IRLHVAALPPVIHQEKLNI SLPPGLSIHIHCTAKAAPLPSVRWVLGDGTQIRPSQFLHGNLFVFPNGTLYIRNLAPKDSGRYECVAANLVGSARRT  
VQLNVQRAANARITGTSPTDVRVGGTLKLDSCASGDPWPRI LWRPLSKRMDIALFSDSRKIVFANGTLVVKSVTDKDGADYLCVARNKVGDDY  
VVLKVDVVMKPIEHKEENDHVKVFYGGDLKVDVATGLPNEPISWSLPGSLVNSFMQSDSDSGGRTKRYVVFNNNGTYFNEVGMREEDGYTCFAEN  
QVGKDEMRVRVKVVTAPATIRNKTYLAVQVPYGDVVTVACEAKGEPMPKVWLSPTNKVIPSSEKYQIYQDGTLLIQAQRSDSGNYTCLVRNSAG  
EDRKTWVHVNVQPPKINGNPNPITTVREIAAGGSRKLDCKAEGIPTPRVLWAFPEGVLPAPYYGNRITVHGNGSLDIRSLRKSQSVQLVCMARN  
EGGEARLIVQLTVLEPMKPIFHDPISEKITAMAGHTISLNCASAGTTPSLVWVLNPGTDLQSGQQLQRFYHKADGMLHISGLSSVDAGAYRCVAR  
NAAGHTERLVSLKVLKPEANKVHNLVSIINGETLKLPCPTPPGAGGQRFWSWLPNGMHLEGPQTLGRVSLDNGTLTVREASVLDRTGYTCRMATE  
YGPSVTSIPVIVIAYPPIRITSEPTPIVYTRPGNTVKNLNCMAMGIPKADITWELPKSHLKAGVQARLYGNRFLHPQGSLLTIQATQORDAGFYCKMAK  
NILGSDSKTTYIHVF

FIG. 2

Levels of Adlcan mRNA in human cartilage by RT-PCR

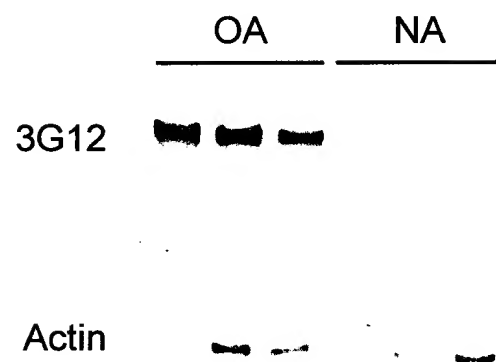


FIG.3



FIG.4

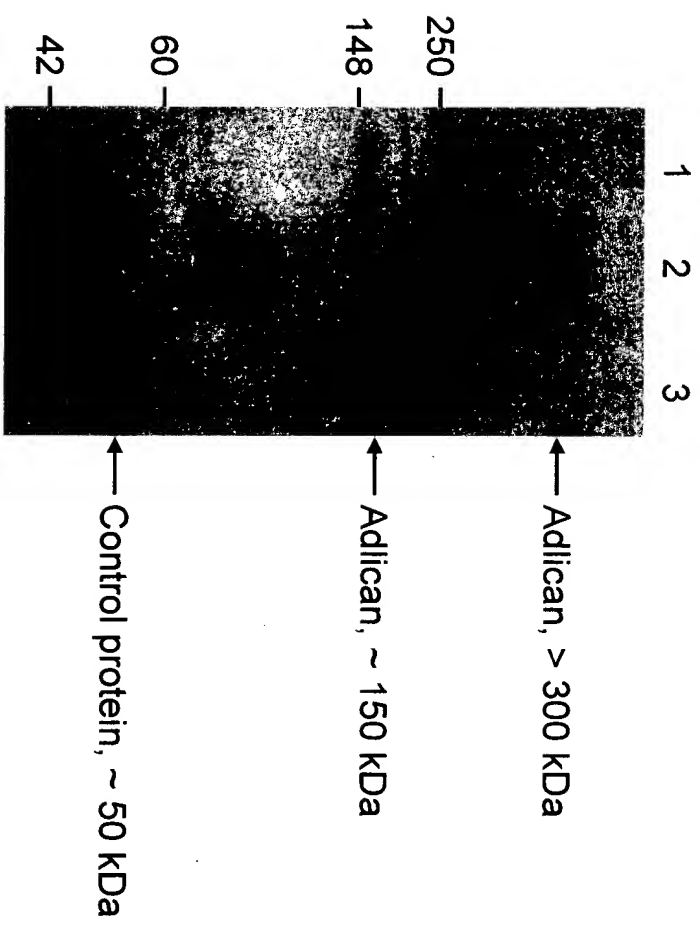


FIG.5

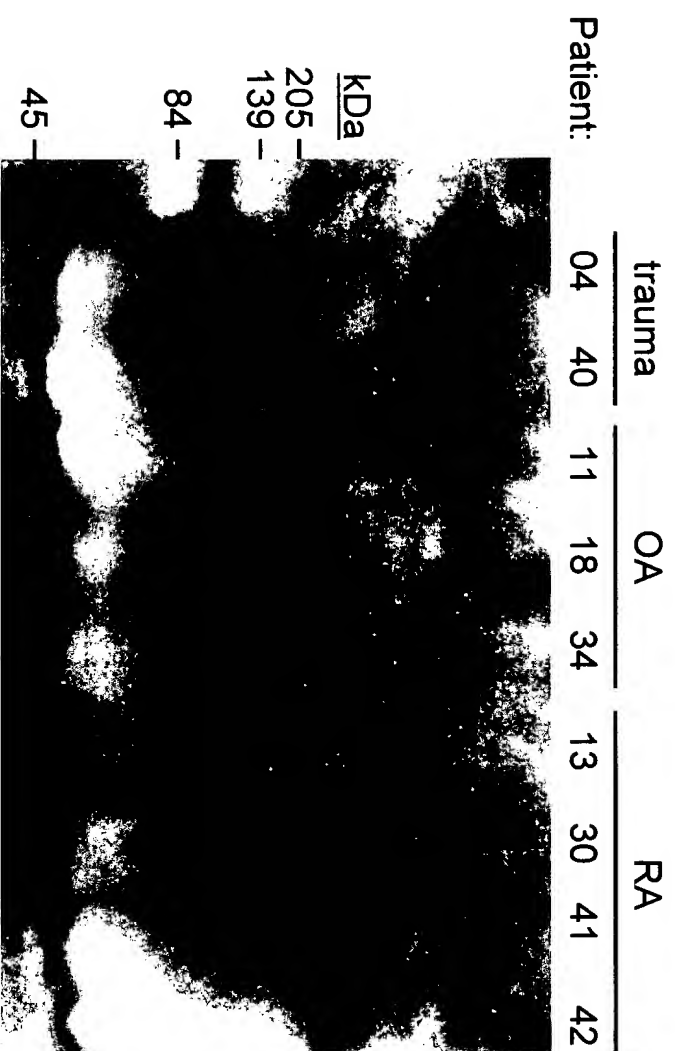


FIG.6

DIAGNOSIS	Western blot positive/total
trauma	1/2
gout	0/3
OA, mild/mod.	2/4
OA, severe	4/4 ←
RA, moderate	2/6
RA, severe	1/2